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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/582,258

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Pier Giorgio Laportella

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EXAMINER

GOTTLIEB, ELIZABETH C

ART UNIT

PAPER NUMBER

3676

NOTIFICATION DATE

DELIVERY MODE

08/05/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@ljp-iplaw.com

Office Action Summary	Application No. 10/582,258	Applicant(s) LAPORTELLA, PIER GIORGIO	
	Examiner Elizabeth C. Gottlieb	Art Unit 3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 44-85 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 44-85 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because Figures 7A-7C, 16A and 16D indicate the top dead center (TDC) and bottom dead center (BDC) locations in hatched markings, however the labels adjacent the hatching are "PMS" and "PMI" which do not appear to be the English abbreviations for top and bottom dead center.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "ground 4" is not depicted in Figure 1.
3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the safety device of claim 73 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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Specification

4. The abstract of the disclosure is objected to because the abstract should not contain legal phrases such as "means for". Furthermore, the abstract should be constructed as a narrative paragraph, not a run-on sentence. Correction is required. See MPEP § 608.01(b).

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

6. The disclosure is objected to because of the following informalities: the specification does not include headings as suggested by 37 CFR 1.77(b) (see below).

Appropriate correction is required.

7. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

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(I) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1 and 44-85 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. *Regarding claims 1, 44-85:* The term "apt" is indefinite. It is unclear if Applicant is intending to state the elements perform the respective function or if they are capable of the function. For examination purposes, "apt" will be read as "capable of"

11. Claim 46 recites the limitation "said third hoisting element" in line 1. There is insufficient antecedent basis for this limitation in the claim.

12. Claim 52 recites the limitation "said passage hole" in line 2. There is insufficient antecedent basis for this limitation in the claim.

13. *Regarding claim 53:* It is unclear what is meant by "substantially semi-cylindrical shape".

14. *Regarding claims 53, 56, and 60:* The term "exhibit" introduces confusion as it is unclear if the surface (recess in claim 60) has a high friction coefficient or if the surface (recess) just acts like it has a high friction coefficient.

15. *Regarding claims 54, 57, 61, and 70:* The term "and/or" in line 2 is indefinite. It is unclear if Applicant is claiming the limitations together or in the alternative. It is suggested that the use of "and/or" be changed to –at least one of–.

16. *Regarding claim 55:* It is unclear what is meant by "substantially having a globe-shaped contour".

17. Claim 59 recites the limitation "said tightening elements" in line 1. There is insufficient antecedent basis for this limitation in the claim.

18. *Regarding claim 63:* It is unclear what is meant by "substantially shaped as a connecting rod".

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19. Claim 67 recites the limitation "said racks" in line 2. There is insufficient antecedent basis for this limitation in the claim.

20. *Regarding claim 72:* Line 2 states "the arrangement being such that such levers". This language is confusing. It is suggested to amend the language to --said levers-- or --the levers--.

21. Claim 74 recites the limitation "said moving assembly" in line 2. There is insufficient antecedent basis for this limitation in the claim.

22. Claim 81 recites the limitation "said rods" and "said arm" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

23. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

24. Claims 1, 44-46, 49-50, 52-54, 59-61, 70, and 73-75 are rejected under 35 U.S.C. 102(b) as being anticipated by Brown (US Patent No. 3,096,075).

25. *Regarding claim 1:* Brown discloses an apparatus comprising:

a support frame (**Figure 1, 36 and 40**), a first hoisting element (**11**) fixed to said frame (**column 2, lines 61-63**) and a second movable hoisting element (**12**), and actuation means (**89, 115, 116**) apt to move said second hoisting element giving thereto a cyclic reciprocating motion between a bottom dead center (**Figure 3**) and a top dead center (**Figure 2**), each of said first and second hoisting elements comprising means for tightening (**51**) the piping to be moved, the arrangement being such that said piping, owing to said tightening means be constrained to said second hoisting element during a first half of the movement cycle (**pipe T is constrained to second element 12 as shown in Figure 3**) and constrained to said first hoisting element during a second half of said cycle (**pipe T is constrained to first element 11 as shown in Figure 2**), overall attaining an axial movement of said piping substantially

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equal to the distance between said top dead center and said bottom dead center (**inherent to the operation of the device of Brown**).

26. *Regarding claim 44:* Brown discloses said first and second hoisting elements are mounted in a manner such as to be constantly aligned during their relative motion (**Figures 1-3 depict the elements 11 and 12 are aligned**).

27. *Regarding claim 45:* Brown discloses a third hoisting element (**Figure 1, 10**), integral to said frame and aligned to said first and second hoisting elements (**Figures 1-3 depict the elements 10, 11, and 12 are aligned**).

28. *Regarding claim 46:* Brown discloses each of said first, second, and third hoisting elements comprises a boxed body (**Member 10 has boxed body 20, member 11 has boxed body 35, and member 12 has 75, 76**) having a through hole (**as depicted in Figure 1**) apt to allow the passage of the piping to be moved.

29. *Regarding claim 49:* Brown discloses said actuation means comprises an electric motor (**Figure 1, 89**) and a connecting rod system (**40**).

30. *Regarding claim 50:* Brown discloses said actuation means comprises a hydraulic drive system (**89, 115, 116**) comprising one or more rams (**40**) connected between said frame and said second movable hoisting element (**as depicted in Figure 1**).

31. *Regarding claim 52:* Brown discloses each of said hoisting elements comprises a wall portion internal to said passage hole (**Figure 1 depicts that the through holes of members 11 and 12 have inner walls**).

32. *Regarding claims 53 and 54:* Brown discloses said wall portion has a substantially semi-cylindrical shape (**Figure 7 depicts that the inner walls of 51 have a substantially cylindrical shape**) and a surface made in a manner such as to exhibit a high friction coefficient and said tightening means comprise toothings (**Figures 4 and 5 depict the inner surface has teeth 54**).

33. *Regarding claim 59:* Brown discloses said tightening elements comprise a tie block having a recess reproducing in negative the contour of said piping (**Figures 7 and 8 depict both blocks 11 and 23 have a recess caused by 51 which is a negative contour of the pipe**).

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34. *Regarding claims 60 and 61:* Brown discloses said recess exhibits a high friction coefficient and said recess comprises toothings (**Figures 4 and 5 depict the inner surface has teeth 54**).
35. *Regarding claim 70:* Brown discloses a control system (**Figure 1, comprising valves v1-v4**).
36. *Regarding claim 73:* Brown discloses a safety device (**Figure 2, "P"**).
37. *Regarding claim 74:* Brown discloses a control bar (**40**) slidably connected to said moving assembly (**See paragraph 17 above, however 40 is slidably connected to member 11 and frame 36**).
38. *Regarding claim 75:* Brown discloses said control bar is apt to translate vertically (**as depicted in Figures 1-3**) in a manner such as to assume a first top position (**Figure 2**) and a second bottom position (**Figure 3**) by means of said second hoisting element.

Claim Rejections - 35 USC § 103

39. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 40. Claims 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown (US Patent No. 3,096,075) in view of Ayling (US PGPUB 2005/0103526).**

41. *Regarding claims 47-48:* Brown does not expressly disclose said second movable hoisting element comprises wheels apt to slide along said guides and said guides comprise respective rack portions and said wheels are gears.

Ayling discloses a moveable member that slides by gears along a rack (**Figure 11; [0083]**).

At the time of the invention, it would have been obvious to a person having ordinary skill in the art to try the apparatus of Brown with a gears and a rack, as taught by Ayling, to achieve the predictable result of movement of the second element in the desired direction.

- 42. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown (US Patent No. 3,096,075) in view of Albaugh (US Patent No. 1,498,062).**

43. *Regarding claim 51:* Brown discloses said actuation means comprises a motor (**Figure 1, 89**).

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Brown does not expressly disclose a worm screw-nut screw system for the transfer of motion to said second hoisting element.

Albaugh discloses a worm screw apparatus for transfer of motion (**Figure 1**).

At the time of the invention, it would have been obvious to a person having ordinary skill in the art to try the apparatus of Brown, with a worm screw, as taught by Albaugh, to achieve the predictable result of movement of the second element in the desired direction.

44. Claims 55-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown (US Patent No. 3,096,075) in view of Macumber (US Patent No. 2,519,680).

45. *Regarding claims 55-57:* Brown does not expressly disclose said tightening means comprises a roll element, substantially having a globe-shaped contour, apt to cooperate with an external wall of said piping. Brown also does not expressly said roll element has a surface made in a manner such as to exhibit a high friction coefficient and said surface of said roll element has knurls and/or toothings apt to mesh to an external wall of said piping. Brown does not expressly disclose one or more elastic elements.

Macumber discloses an apparatus for moving pipe with a roll element with a globe-shaped contour (**Figure 5, 42**) configured to grip the pipe (**column 3, lines 37-39**). Figures 4 and 5 depict the member 42 with a higher friction, knurled surface. Macumber discloses

At the time of the invention, it would have been obvious to a person having ordinary skill in the art to try the apparatus of Brown, with a roll element, as taught by Macumber, to engage the pipe while assisting the pipes movement in the desired direction (**Macumber; column 1, lines 1-6**).

46. Claims 55, 58, 64, 66-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown (US Patent No. 3,096,075) in view of O'Quinn (US Patent No. 2,433,477).

47. *Regarding claims 55, 58, 64, 66-69:* Brown does not expressly disclose Brown does not expressly disclose said tightening means comprises a roll element, substantially having a globe-shaped contour, apt to cooperate with an external wall of said piping (**claim 55**). Brown does not expressly disclose said roll element is integral to a rotation shaft and mounted on a pair of gears (**claim 58**). Brown does not expressly disclose said gears re coupled to respective racks and said racks have a curvilinear sliding contour (**claims 64 and 66**). Brown does not expressly disclose a pair of guide slots, obtained on

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the lateral sides of said boxed body and parallel to said racks, apt to the sliding of said shaft (**claim 67**).

Brown does not expressly disclose two helical springs connected between the ends of said shaft and respective anchoring points on said boxed body (**claims 68 and 69**).

O'Quinn discloses a pipe extractor with a roll element (**Figure 1, 15**) with a globe shaped contour (**depicted in Figure 1**) for engaging a pipe (**16**). O'Quinn discloses the roll element is integral to a rotation shaft (**generally 14**) mounted on a pair of gears (**20**). O'Quinn discloses the gears (**20**) are coupled to racks (**19, Figure1 depicts a curvilinear contour**). O'Quinn discloses a pair of guide slots (**12**) on lateral sides of a boxed body (**10**) parallel to the racks (**19**). O'Quinn discloses two springs (**Figure 2, 29 and 30**) connected to the ends of the shaft (**depicted in Figure 2**) and anchoring points (**on element 28**).

At the time of the invention, it would have been obvious to a person having ordinary skill in the art to try the apparatus of Brown, with the tightening means and roll element as taught by O'Quinn, to achieve the predictable result of extracting pipe from a well (**O'Quinn; column 1, lines 4-16**).

48. Claims 84-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown (US Patent No. 3,096,075) in view of Watson (US Patent No. 5,246,076).

49. *Regarding claims 84-85:* Brown does not expressly disclose a photoelectric sensor.

Watson teaches using a photoelectric sensor (**Figure 1, 202**) as a position sensor to identify the location with a stroke a pump is at (**column 4, lines 9-21**).

At the time of the invention, it would have been obvious to a person having ordinary skill in the art to try the apparatus of Brown, with a photoelectric sensor, as taught by Watson, to achieve detection of the location of the pipe moving apparatus.

Allowable Subject Matter

50. Claims 62-63, 65, 71-72, and 76-83 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth C. Gottlieb whose telephone number is (571)270-5566. The examiner can normally be reached on Monday - Thursday, 9am - 3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer Gay can be reached on 571-272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jennifer H Gay/
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3676

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